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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,238	02/01/2001	Stefano Lanfredi	243768054US	8142

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PERKINS COIE LLP  
 PATENT-SEA  
 P.O. BOX 1247  
 SEATTLE, WA 98111-1247

EXAMINER
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FISHER, MICHAEL J

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/776,238

Applicant(s)

LANFREDI ET AL.

Examiner

Michael J Fisher

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the submitted drawings are informal in that they include handwriting. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "casing" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 23 is objected to because of the following informalities: In line 2 the word "including" would appear to be meant to be "includes" so as to form agreement in tenses. Further in claim 23 is the limitation, "...sending a web page to..." Correct terminology would appear to be, '...sending a *link* to a web page...' Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19,21,32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the calculation engine" in line 5. There is insufficient antecedent basis for this limitation in the claim.

As to claims 4 and 21, it is unclear and indefinite as to how the user could send a layout design for the configuration as the configuration is not calculated by the user but by the calculation engine.

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As to claims 13 and 32, it is unclear to what the phrase, "casing type" is referring. Specifically, what the casing surrounds.

As to claims 14 and 33, it is unclear what is meant by "stage compression ratios". Specifically, there is no mention of a 'compression ratio' in either the specification or the figures.

Claims 2,3 and 5-12,15,16,18 and 19 are rejected as depending from a rejected claim.

Note: For examination purposes, it will be assumed that the first mention of the "calculation engine" is meant to be "...a calculation engine...".

As for claim 4, for examination purposes, it will be assumed that the "layout design" is meant to be the plant in which the final configuration is to be installed.

As for claims 13 and 32, for examination purposes the 'casing' will be considered to be a part of the compressor as the specification is silent on the matter and the drawings include a 'compressor casing'.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. There is no technological innovation in the claims. The only use of technology is trivial, specifically, sending and receiving data. There is no limitation directed toward manipulating the data. While there is claimed a

"calculation engine", its workings are not positively claimed and it merely sends and receives data.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4-13,15-18,20,21,24-32 and 34-37 are rejected under 35 U.S.C. 102(b) as being anticipated by US PAT 5,347,466 to Nichols et al. (Nichols).

As to claim 1, Nichols teaches a computer system for presenting data relating to a selection of a compression train (title) which receives from a user a configuration data set (206 as best seen in fig 3 and figs 4A-G), sending the data to a calculation engine (figs 4A-G), receiving a proposed configuration from the engine (figs 5A-K) and sending the data to the user in a display page (figs 5A-K) and further discloses a quotation for the configuration (390,420,428,432,434). It would be inherent that there is a request for the quotation as the quotation is provided.

As to claim 20, Nichols discloses a list projects component for managing a list of projects, (figs 4 A-G), a new configuration component (figs 5 A-K) and a quote component (390,420,428,432,434).

As to claims 4 and 21, Nichols discloses the user sending the "layout design" (fig 4A), Nichols further discloses sending a display page (fig 1).

As to claims 5 and 24, Nichols allows the user to group configuration data sets into projects (each fig 4 from A-G is such a project).

As to claims 6 and 25, the data includes environmental conditions, driver specifications, and compression data (col 19, line 51-col 20, line 13).

As to claims 7 and 26, the environmental conditions include design pressure (col 19, line 58, group c)), and design temperature (386).

As to claim 8, Nichols discloses driver type (fig 5K).

As to claim 9, the specification includes fuel gas composition (fig 320,328,344).

As to claims 10 and 29, the data includes suction and discharge pressure and temperature (324).

As to claim 11 and 30, the data includes gas composition (figs 5A, 5B, 5I).

As to claims 12 and 31, operation conditions include compressor options (fig 5K).

As to claims 13 and 32, as best understood, 17 and 36, Nichols includes "Manufacturer's Performance Data", which data would inherently include casing type, in fig 5K, which is the compressor module.

As to claims 15,16,18,34,35 and 37, the operating data includes interstage data including pressure drops (figs 5D, 5G, 5H, 5K, as it shows input and output, it would inherently include drops) and interstage discharge pressures (fig 5K), discharge temperatures (324) and further, as it discloses the stages it would inherently disclose the number.

As to claim 27, Nichols discloses driver type (fig 5K), gas turbine data (fig 314), and compressor speed (316).

As to claim 28, Nichols discloses fuel gas composition (fig 5A).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2,3,14,19,22,23,33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols.

As to claims 2 and 3, as best understood and 22 and 23, Nichols does not teach using the Internet. Nichols does, however teach using a computer (fig 2). It is very well known in the art to connect computers to the Internet. Therefore, it would have been obvious to one of ordinary skill in the art to use the Internet with a web page so the system could be used by individuals at disparate locations.

As to claims 14 and 33, as best understood, Nichols does not specifically mention stage compression ratios. It would have been obvious to one of ordinary skill in



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the include compression ratio as this is used to design thermodynamic efficiency (fig 5K).

As to claims 19 and 38, Nichols discloses discharge flow (fig 5K), power margin (included in thermodynamic efficiency) and mentions power loading for each turbine (346) but does not specifically mention absorbed power at driver shaft. It would have been obvious to one of ordinary skill in the art to include power absorbed at driver shaft to ensure the shaft is strong enough to absorb the power, else it could fail.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US PAT 6,289,299 to Daniel Jr. et al. disclose a system and method for designing a mechanical process using data required to model the process, US PAT 5,875,319 to Maier discloses a method for modeling a subprocess using configuration data, US PAT 5,021,976 to Wexelblat et al. discloses a method and system for generating visual presentations of information structures that model physical processes using a computer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Fisher whose telephone number is 571-272-6804. The examiner can normally be reached on Mon.-Fri. 7:30am-5:00pm alt Fri. off.

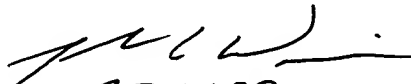
The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MF

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